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EXAMINER	
TWEEL JR.J	
ART UNIT	PAPER NUMBER
2736	12

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)	
08/835,625	MOLL	
Examiner	Group Art Unit	
JOHN TWEEL	2736	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 2/1/99.

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-66 is/are pending in the application.

Of the above claim(s)_____ is/are withdrawn from consideration.

☐ Claim(s)_____ is/are allowed.

☒ Claim(s) 1-66 is/are rejected.

☐ Claim(s)_____ is/are objected to.

☐ Claim(s)_____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on_____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on_____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)_____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received:_____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s)._____

☒ Notice of References Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other_____

Office Action Summary

1. This Office action is in response to the amendment filed 2/1/99. Claims 1 and 55 have been amended. Claim 37 has been canceled.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 and 55 remain rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The conclusion drawn by the Examiner from the arguments raised by the Applicant is that an enabling disclosure in reading a user's thoughts is not present. The most troubling point made by the Applicant in their latest remarks contain the following statement drawn from the specification: "Helmet mounted SQUIDs, or an improvement thereon, will provide better localization accuracy and user mobility as technology advances....Some electronics today are proving that cryogenic cooling may not be necessary. The helmet itself may be used inside a shielded room, or the helmet could be used instead of a shielded room. Ultimately, a wireless system may be explored as technology grows." This still leaves open the question: Do we have the technology to do this or not? Building a specification on technology that still requires

advancement seems impractical at best, non-enabling at the very least. Is this something that needs the user to wait until "the future" to use?

Further, much is made from the Applicant that the prior art is nothing more than "biofeedback" and does not involve reading a user's thoughts. However, the sections of the specification the Applicant upholds as the "enabling" process involved in thought-reading appear to be not that dissimilar from the prior art. The conditioned stimuli is retained, recorded, and tagged and then communicated to the user for consideration and correlation. The appropriate designation is assigned when a successful input is identified. These are then recorded in stimulus profiles. Computer programs such as mouse simulators are used in which the thought controlled computer treats the received signals to initiate activity and cause feedback on an attached monitor. The same process is considered for other computer functions such as keyboards, cursors, and other functions. Short term history and user information is obtained from the data base to further refine and augment stimulus information. What is this if not biofeedback? How is this different from a biofeedback system that happens to use EEG, EKG, EMG, or eyeball movement as its input? At present, no strong evidence is present to provide evidence that this system reveals any capabilities not found in the prior art.

4. Claims 1, 3-5, 7-17, 19-22, 24, 32-36, 38-41, 46-48, 51-63, 65, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Junker** in view of **Kuc et al** [U.S. 5,594,849].

For claim 1, the apparatus for controlling a computer operation based on at least one stimulus sensed from a user taught by **Junker** includes the following claimed subject matter, as noted, 1) the claimed stimuli input means is met by the electrodes (No. 22) coupled to the user (No. 10) for detecting at least one stimulus being caused by the thought of the user, 2) the claimed computer having an operating system is met by the control system (No. 29) having an operating system (No. 31) for processing said at least one stimulus to produce a function control signal to control the operation of the operating system without requiring the user to manipulate the user controls, 3) the claimed function selection means comprising a memory is met by the data store (No. 19) in which multiple brain-body signals are stored with each sample from the user, and 4) the claimed identification means for comparing the stimulus to identify a function control signal is met by the foreground loop processor (No. 39) that uses the brain-body signal as a basis for the presentation of various audio and visual feedback. Also external devices such as wheelchair, cursor control, and music synthesizer is connected to the control system for operation. However, the stimuli input means coupled to the user is not a magnetic source imaging means as recited in the claim.

The biomedical magnetism imaging apparatus and method taught by **Kuc et al** performs biomagnetic imaging to determine the location and intensity of current sources within a subject by sensing the magnetic field within the subject. This is accomplished using a number of Superconducting Quantum Interference Devices (SQUIDs) which are fed magnetic field information using pickup coils (No. 4). One great advantage of this invention is the fact that

fewer pickup coils and SQUID magnetometers are needed to gather needed information in a lesser amount of time than previous biomagnetometers. Also, input from multiple dipoles can be displayed simultaneously.

As the system of **Junker** utilizes bio-imaging means to achieve its purposes, it presents the perfect platform onto which an imaging system such as **Kuc** may be applied. As EEG and EMG signals are already gathered, the MSI data could easily be examined for the same purposes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate and MSI system similar to Kuc into the brain-body actuated system of Junker for the purpose of gathering vital information using fewer pickup coils in a lesser amount of time.

For claim 3, the claimed means, coupled to the computer, for contributing alternate or additional inputs concerning the user or the environment of the user is met by the user input devices (No. 20) such as the keyboard, mouse, and the like and their corresponding input interfaces (No. 17) that manipulate music, game, cursor control, and mouse programs suited to a user's environment.

For claim 4, the claimed auxiliary stimuli input means for providing additional or alternative stimuli inputs from the user is met by the electroencephalographic (EEG) and electromyographic (EMG) biopotentials that are correlated to control of the device.

For claim 5, the claimed conditioning means for conditioning the stimulus is met by the amplifier and filter system (No. 24) that amplifies and bandpass filters the brain-body signals.

For claim 7, the preferred electrodes are typically used for electrocardiographic (EKG) inputs.

For claim 8, the equipments for the inputs of the thought controlled system are preferably electroencephalographic (EEG) biopotential inputs.

For claim 9, the claimed communicating means coupled to the computer is met by the processing unit (No. 30) and the input/output bus (No. 57) which communicates information pertaining to the user's thoughts.

For claim 10, the claimed brain stimulating means wherein the computer stimulates brain activity via communicating means is met by the output devices (No. 21) such as the video display, LCD, and LED that stimulate the user's brain depending on the activity selected.

For claim 11, the claimed computer monitor is met by the video display terminal (No. 14).

For claim 12, the claimed designating means coupled to the function selection means is met by the menu bar (No. 602) seen in Figure 6 that designates particular representations of the different stimuli.

For claim 13, the claimed means for avoiding inadvertent or undesired action is met by the bar graphs on the graphic display (No. 600) that represents a selected control signal. These bands indicate to the user the up and down shifting of lock-in frequencies as they follow the shifting of the user's control frequencies. The slide controllers allow the user to adjust gain and responsiveness of all or any selected control signal.

For claim 14, while the "degree of danger" is not explicitly shown in the aforementioned bar graphs, a means of classification among the different control signals is achieved thereby avoiding inadvertent action.

For claim 15, the claimed conditioning means for conditioning the stimulus is met by the amplifier and filter system (No. 24) that amplifies and bandpass filters the brain-body signals.

For claim 16, the claimed means to explore user characteristics for correlation of stimuli is met by the control signal generation program seen in Figure 4 that correlates and assigns up to ten different control signal frequencies in terms of harmonics of the fundamental frequency.

For claim 17, the claimed database for storing inaccuracies is met by the data store (No. 19) that stores the current sample of the input signals and vector quadrature values corresponding to the previously stored control signals as detailed in the explanation of the phase-locked loop program to set a control frequency selected by the user.

For claim 19, the aforementioned phase-locked loop program also determines the optimum control signals to identify the most desirable stimuli corresponding to the proper function.

For claim 20, the claimed comparing means for comparing alternate or additional inputs concerning body functions is met by the foreground loop processor (No. 39) that permits the user to select various application programs (No. 43) for execution. These can be a myriad of output devices (No. 21) and external devices (No. 55).

For claim 21, the claimed stimuli selection means is observed in Figure 5 which depicts acceptance criteria (magnitude, phase, frequency shift) to form previously-stored user stimuli.

For claim 22, the claimed manual control selection means is met by the input devices (No. 20) that permit control of aforementioned acceptance criteria seen in Figures 4 and 5.

For claim 24, the claimed utilization means for selecting stimuli is met by the menu selection property of **Junker** and the phase-locked loop program (No. 34) that lets the system track the predominant frequencies within each separate control signal.

For claim 32, the apparatus of **Junker** is designed to be used by a human.

For claim 33, the claimed thought production means comprising visual displays is met by the output devices (No. 21) such as the video display, LCD, and LED.

For claim 34, the claimed thought production means comprising sounds, smell or other sensible factors is met by the external devices (No. 55) such as the wheel chair, music synthesizer, or sailboat.

For claim 35, Column 8, Lines 23-26 detail how the user is able to sense how changes of EEG biopotentials effect the control signals via feedback presentations of control signal magnitudes.

For claim 36, as seen in Figure 3, step 306 displays a menu from which the user is to choose from different application programs.

For claim 38, the claimed means for detecting coactive stimuli is met by the multiple input devices such as the EEG electrodes (No. 22) and the other input devices (No. 20) such as the keyboard, mouse, and other input means.

For claim 39, the claimed thought signal detection means is met by the cursor control program (No. 314) and the mouse control program (No. 316) that correspond to activation of a mouse or at least one key on a keyboard.

For claim 40, the claimed means for detecting sequential stimuli is met by the control signal generation program that reads sequential sampled brain-body signals (Step 404) through a series of iterations, from one up to 1600.

For claim 41, the desire to have a computer system automatically save into memory and shutdown is as common and well known as electronic computers themselves. Such safety measures are a much-needed safety net in case of power outage, power surges, or inadvertent power-down. Such safety and security measures have been available since computers have been available as separate features or as built-in equipment.

Since **Junker** pertains to electronic operating systems with memory, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate automatic-save and shutdown for the purpose of protecting valuable data from loss or damage that can commonly arise unexpectedly.

For claim 46, the control signal generation program of **Junker** formulates statistics related to computer operation through controlled sampling, those statistics coupled to the data store (No. 19).

For claim 47, the claimed decision-making means is met by the menu of the display screen that enables the user to accept or reject stimuli, based upon the previously stored stimuli.

For claim 48, the claimed recording means is met by the data store (No. 19) that records each application required for each function to produce an output describing a minimum configuration to achieve at least one function.

For claim 51, the claimed bodily communication means to provide for a communication path for at least one stimulus between the user's brain and body part is met by the aforementioned electrodes (No. 22) that comprise a communication channel between the operator's brain-body signals and various external devices (No. 55) such as a wheel chair, cursor control, sailboat, or other ambulatory devices.

For claim 52, the claimed miniaturized unit is met by the headband mentioned in the specification wherein the three electrodes used in the system are located on the user's body. The electronics used with the apparatus are designed to be used in microcomputers and are thus miniature in size.

For claim 53, the term "remote" is interpreted to mean "from a distance". In this sense, the claimed remote communication means is met by the input interface (No. 17) and the

input/output bus (No. 57) that can assist the user to control several remote applications, such as a sailboat, wheelchair, and music composition program.

For claim 54, the claimed user-worn device for detecting stimulus is met by the aforementioned headband located on the user's forehead wherein the user-worn headband is in communication with the computer.

For claim 55, the apparatus for controlling computer operation from one or more stimuli sensed from the human body taught by **Junker** includes the following claimed subject matter, as noted, 1) the claimed detecting means for detecting stimuli is met by the electrodes (No. 22) coupled to the user (No. 10) for detecting stimuli to produce stimuli, 2) the claimed selecting means for selecting one or more of said detected stimuli is met by the user input devices (No. 20) such as the keyboard, mouse, and others, 3) the claimed identification means for identifying one or more said detected stimuli is met by the foreground loop processor (No. 39) that uses the brain-body signal as a basis for the presentation of various audio and visual feedback, and 4) the claimed receiving means for receiving said function control signal is met by the microprocessor processing unit (No. 30) that transmits data between it, the operating system programs and the data store (No. 19). However, the stimuli input means coupled to the user is not a magnetic source imaging means as recited in the claim.

The biomedical magnetism imaging apparatus and method taught by **Kuc et al** performs biomagnetic imaging to determine the location and intensity of current sources within a subject by sensing the magnetic field within the subject. This is accomplished using a number of

Superconducting Quantum Interference Devices (SQUIDs) which are fed magnetic field information using pickup coils (No. 4). One great advantage of this invention is the fact that fewer pickup coils and SQUID magnetometers are needed to gather needed information in a lesser amount of time than previous biomagnetometers. Also, input from multiple dipoles can be displayed simultaneously.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above.

For claim 56, the claimed designating means for designating a selected function is met by the menu bar (No. 602) and accompanying bar graphs that correspond to the thought which causes the selected function for controlling the computer operation.

For claim 57, the claimed auxiliary stimuli means is met by the accompanying input devices (No. 20) such as the keyboard and mouse that supplements the brain-body signals.

For claim 58, the claimed auxiliary detecting means is met by the electromyographic biopotentials (EMG) detected along with the aforementioned EEG signals.

For claim 59, the claimed interfacing means to couple stimuli means to the computer is met by the amplifier filter (No. 24) and A/D converter (No. 26) that creates compatibility with the control system.

For claim 60, the claimed conditioning means is met by the aforementioned amplifier and filter system (No. 24) that conditions the stimuli for use by the selecting means.

For claim 61, the claimed accepting means for accepting inputs is met by the processing system (No. 30) that transmits data between the input devices, the operating system programs, and the data store.

For claim 62, the claimed output means for outputting data to auxiliary systems is met by the contact interface (No. 54) and D/A converter (No. 58) that controls auxiliary systems and external devices. The operating system (No. 31) with its data store (No. 19) outputs commands to auxiliary systems for computer operation.

For claim 63, the claimed data bases for storing user unique stimuli is met by the data store (No. 19) that stores digital brain-body signals in each sample wherein brain-body processing is accomplished. The thought processes needed to play a game of pinball are certainly associated and coactive.

For claim 65, the claimed data bases for storing user unique stimuli is met by the data store (No. 19) that stores digital brain-body signals in each sample wherein brain-body processing is accomplished. Thoughts that control a computer are certainly considered psychological impact thoughts.

For claim 66, the claimed data bases for storing user unique stimuli is met by the data store (No. 19) that stores digital brain-body signals in each sample wherein brain-body processing is accomplished. Thoughts that choose between certain presented choices are certainly candidate stimuli.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Junker** in view of **Kuc et al** as applied to claim 1 above, and further in view of **Thatte et al**.

The apparatus taught by **Junker** includes the claimed subject matter as noted in the rejection of claim 1 above. However, nowhere in the reference is magnetic source imaging mentioned as stimuli input means.

The computer system enabling automatic memory management operations taught by **Thatte** enables automatic memory operations independently of a CPU. The circuitry for the binding registers (No. 22) to be managed can be fabricated using standard TTL or MSI circuitry using well known techniques. The reference teaches that MSI technology is very common in computer memory functions wherein memory management is to be accomplished.

Since both **Junker** and **Thatte** pertain to computer operating systems with memory control, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement MSI technology to manage the inputs into memory registers similar to that of Thatte for the purpose of using a well known and common technology to implement a common computer function.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Junker** in view of **Kuc et al** as applied to claim 1 above, and further in view of **Hartzell et al**.

The apparatus as taught by **Junker** includes the claimed subject matter as discussed in the rejection of claim 1. However, one feature that the reference does not teach is that the apparatus

can be used by a plurality of users. Also a database for storing unique stimuli for respective users is also not included.

The brainwave-responsive apparatus taught by **Hartzell** teaches an apparatus that is for use with one or more subjects simultaneously for causing an output device to perform productive functions. The system consists of one or more EEG detectors (Nos. 10a-n) each having input lines (No. 12) from a plurality of users. The EEG detectors are designed to generate output signals corresponding to different brain waves to provide signals or actually controlling an output device (No. 30). The EEG devices also stores unique stimuli depending on the user's brainwaves onto conventional strip chart recorders or magnetic tape. One advantage of this system is the fact that a productive function is performed using empathy training whereby two or more subjects may be trained to produce theta waves, either simultaneously or synchronously. Also elderly subjects can be trained to provide beta brainwaves on command.

Since both **Junker** and **Hartzell et al** both pertain to brainwave controlled apparatus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the system of Junker to be used by a plurality of users and for storing user unique stimuli for the purpose of accomplishing and recording productive tasks through the use of simultaneous or synchronous activation through multiple users. Also, the benefits to the elderly and children should not be overlooked.

7. Claims 6, 23, 25-31, 49, 50, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Junker** in view of **Kuc et al** as applied to claims 1 and 4 and further in view of **Gould**.

For claim 6, the apparatus of **Junker** includes the claimed subject matter as disclosed in the rejection of claims 1 and 4 above. However, the equipments to provide auxiliary equipment means is not comprised of a magnetic resonance imaging means (MRI).

The stimulating a beneficial human response by using visualization of medical scan data to achieve psychoneuroimmunological virtual reality taught by **Gould** provides a patient with a view of their internal anatomy based on medical scan data. The scan data is obtained by a myriad of three-dimensional scanning, such as Computer-Aided Tomography (CAT), Positron Emission Tomography (PET), and Magnetic Resonance Imagery (MRI). Input devices such as a keyboard and mouse are used as "tools" through which the patient acts upon, corrects, eradicates, or otherwise reduces the effect of their ailment. Computer system (No. 1) contains the basic subsystems such as central processor, system memory, display adapter, and display device to provide biofeedback to produce a heightened mental and physical awareness of the patient's eradication of their ailment. With such information at the patient's disposal, it will take the advancements in scanning systems and visualization technology to not only diagnose, but to treat the patient's ailment.

Since both **Junker** and **Gould** both pertain to medical imaging and biofeedback technology, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to incorporate an MRI system into the actuated system of Junker for the purpose of utilizing an advanced scanning system through which proper feedback and patient control can be implemented.

For claim 23, the phase-locked loop seen in Figure 5 of **Junker** determines acceptance criteria of the stimulus. However, the method is not explicitly determined using "artificial intelligence", although a computer able to run AI programs might meet this property.

The visualization system of **Gould** uses software routines executed in a computer. The routines are implemented by any means as is known in the art. Any number of programming languages such as "C", FORTRAN, assembly language as well as procedural, object oriented or artificial intelligence techniques may be employed. Any of these compatible software systems may be used in the execution of the desired flowcharts and methods.

Since both references pertain to electronic equipment using software applications, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement an AI means for determining acceptance criteria for the purpose of taking advantage of this well-known and flexible computing method.

For claim 25, the bar graphs (No. 600) of **Junker** and assignment of frequencies to certain applications recognize and analyze patterns of stimuli during the control signal generation program. The artificial intelligence of **Gould** meets the AI criteria.

For claim 26, the height of the bars in **Junker** signifies the signal strength of the stimuli associated with that particular application. The artificial intelligence of **Gould** meets the AI criteria.

For claim 27, the calculation of the average quadrature values of the X and Y coordinates and phase and magnitude controls enhances control of the computer to a higher plateau. The artificial intelligence of **Gould** meets the AI criteria.

For claim 28, the system of **Gould** applies reason to perform control and treatment of the patient's ailment. The artificial intelligence of **Gould** meets the AI criteria.

For claim 29, the apparatus of **Junker** includes games and problem solving to perform control of the computer operating system. The artificial intelligence of **Gould** meets the AI criteria.

For claim 30, the games, music composition, cursor manipulation and other applications of **Junker** suggests and stimulates ideas and also integrates statistics to stimulate ideas for the user. The artificial intelligence of **Gould** meets the AI criteria.

For claim 31, the data store (No. 19) of the **Junker** reference as well as basic language processor (No. 33) learns control data and control signals that can be implemented in the future. The artificial intelligence of **Gould** meets the AI criteria.

For claim 49, the claimed diagnostic means is met by the biometric identification (No. 108) of **Gould** that relays information regarding the physical state of the patient to take corrective

action whenever faulty conditions, or the ailment, is identified. The artificial intelligence of **Gould** meets the AI criteria.

For claim 50, the claimed input means is met by the input device (No. 120) used by the patient of **Gould** that permits the user to input recommendations to take corrective action.

For claim 64, the claimed data bases for storing user unique stimuli is met by the data store (No. 19) that stores digital brain-body signals in each sample wherein brain-body processing is accomplished.

8. Claims 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Junker** in view of **Kuc et al** as applied to claim 1 above and further in view of **Adachi**.

For claim 42, the apparatus taught by **Junker** and **Kuc et al** includes the claimed subject matter as noted in the rejection of claim 1 above. However, the reference does not cite means for detecting movement of the user's eye to initiate a function control signal.

The device for measuring a retina reflected light amount and a gaze detecting apparatus using the same taught by **Adachi** includes a series of measuring devices (Nos. 11-14) are fixedly arranged at four corner positions of a monitor device. Each device includes a laser (No. 111), semitransparent mirror (No. 113), and charge couple device (CCD) (No. 114) that receives infrared rays emitted by the laser and reflected by the face of the person. An intersection point P among all four devices indicates the location and orientation of the pupil of the person. The retina characteristics are continually monitored to calculate the differing pupil position and displacement

angles. One obvious application of this technology is the control of a cursor on a computer monitor in lieu of the up-and down- keys of a keyboard. This particular combines a high level of accuracy at a decreased cost from other retina position detectors.

Since both **Junker** and **Adachi** both pertain to biologically inputted devices, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a means for detecting movement of the user's eye to initiate a control signal for the purpose of using the eye as an easy and inexpensive way to manipulate the cursor controller around the monitor output.

For claim 43, the claimed adjustment means is met by the measurement devices of **Adachi** that adjusts the input to correlate with the orientation of the user's eye.

For claim 44, the claimed localization means is met by the display device (No. 4) of **Adachi** that identifies on the display the location in the user of the source of the stimulus.

For claim 45, the aforementioned measurement devices also meet the adapting means for they adapt the display to change in response to a change in the location (eye movement) of the source.

9. Applicant's arguments with respect to claims 1-66 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication should be directed to Examiner John Tweel at telephone number (703) 308 7826. The examiner can normally be reached on Monday-Thursday, 8:30a-5:00p. The examiner can also be reached on alternate Fridays.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on (703) 305 4717. The fax phone number for this group is (703) 305 3988.

John Tweel

April 9, 1999

JEFFERY HOFSASS
SUPERVISORY PATENT EXAMINER
GROUP 2700